

AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1-21. (Cancelled).

22. (Currently amended) A compound comprising:

a ~~tumor-seeking biomolecule~~ moiety having an affinity for cancer cells;

an intercalating moiety coupled to the moiety having an affinity for cancer cells,
wherein the intercalating moiety is configured to insert into the structure of
deoxyribonucleic acid ~~tumor-seeking biomolecule and comprising acridine, porphyrin,~~
~~ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic~~
~~activity; and~~

a metal complexed with the intercalating moiety.

23. (Previously presented) The compound of claim 22, wherein the metal is a radioactive metal.

24. (Previously presented) The compound of claim 23 wherein the radioactive metal is a γ -emitting nuclide.

25. (Currently amended) The compound of claim 23, wherein the radioactive metal ~~is selected from~~ comprises Tc-99m, Re-186, Re-188 ~~[[and]], or Mn, or combinations thereof.~~

26. (Currently amended) The compound of claim 22, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from the group consisting of~~ comprises a peptide ~~peptides and, a protein~~ proteins, or any combination thereof.

27. (Currently amended) The compound of claim 23, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from the group consisting of~~ comprises a peptide ~~peptides and, a protein-proteins, or any combination thereof.~~

28. (Currently amended) The compound of claim 22, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from~~ comprises a ~~somatostatin-receptor binding molecule[[s]], a neurotensin-receptor binding molecule[[s]], a bombesin-receptor binding molecule[[s]], a GPIIb/IIIa-receptor binding molecule[[s]], an antibodies~~ antibody, a penetratine[[s]], [[and]] or a glycoprotein[[s]], or any combination thereof.

29. (Currently amended) The compound of claim 23, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from~~ comprises a ~~somatostatin-receptor binding molecule[[s]], a neurotensin-receptor binding molecule[[s]], a bombesin-receptor binding molecule[[s]], a GPIIb/IIIa-receptor binding molecule[[s]], an antibodies~~ antibody, a penetratine[[s]], [[and]] or a glycoprotein[[s]], or any combination thereof.

[[28]]30. (Currently amended) The compound of claim 22, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from~~ comprises an ~~anti-sense oligonucleotide[[s]], a deoxy-uridine, [[and]] or a spermidine, or any combination thereof.~~

[[29]]31. (Currently amended) The compound of claim 23, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from~~ comprises an ~~anti-sense oligonucleotide[[s]], a deoxy-uridine, [[and]] or a spermidine, or any combination thereof.~~

[[30]]32. (Currently amended) A composition comprising:
~~at least one of~~ an excipient ~~and a diluent~~; and
a compound comprising:
a ~~tumor-seeking biomolecule moiety~~ having an affinity for cancer cells;
an intercalating moiety coupled to the moiety having an affinity for cancer cells,
wherein the intercalating moiety is configured to insert into the structure of
deoxyribonucleic acid ~~tumor-seeking biomolecule and comprising acridine, porphyrin,~~
~~ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic~~
~~activity~~; and
a metal complexed with the intercalating moiety.

[[31]]33. (Currently amended) The composition of claim [[30]]32, wherein the metal is a radioactive metal.

[[32]]34. (Currently amended) The composition of claim [[30]]32, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from the~~
~~group consisting of~~ comprises a peptide[[s]], a[[and]] protein[[s]], or any combination
thereof.

[[33]]35. (Currently amended) The composition of claim [[31]]33, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected from the~~
~~group consisting of~~ comprises a peptide[[s]], a[[and]] protein[[s]], or any combination
thereof.

[[34]]36. (Currently amended) The composition of claim [[30]]32, wherein the moiety having an affinity for cancer cells ~~tumor-seeking biomolecule is selected~~
~~from~~ comprises a somatostatin-receptor binding molecule[[s]], a neurotensin-receptor
binding molecule[[s]], a bombesin-receptor binding molecule[[s]], a GPIIb/IIIa-receptor

binding molecule[[s]], an antibodyantibodies, a penetratine[[s]], or a[[and]]
glycoprotein[[s]], or any combination thereof.

[[35]]37. (Currently amended) The composition of claim [[31]]33, wherein the
moiety having an affinity for cancer cells tumor-seeking biomolecule is selected
fromcomprises a somatostatin-receptor binding molecule[[s]], a neurotensin-receptor
binding molecule[[s]], a bombesin-receptor binding molecule[[s]], a GPIIb/IIIa-receptor
binding molecule[[s]], an antibodyantibodies, a penetratine[[s]], or a[[and]]
glycoprotein[[s]], or any combination thereof.

[[36]]38. (Currently amended) The composition of claim [[30]]32, wherein the
moiety having an affinity for cancer cells tumor-seeking biomolecule is selected
fromcomprises an anti-sense oligonucleotide[[s]], a deoxy-uridine, [[and]]or a spermidine,
or any combination thereof.

[[37]]39. (Currently amended) The composition of claim [[31]]33, wherein the
moiety having an affinity for cancer cells tumor-seeking biomolecule is selected
fromcomprises an anti-sense oligonucleotide[[s]], a deoxy-uridine, [[and]]or a spermidine,
or any combination thereof.

[[38]]40. (Currently amended) A method of using a composition, the method
comprising:

administering a composition to a medical patient, wherein the composition includes
a compound comprising:

a tumor-seeking biomolecule moiety having an affinity for cancer cells;
an intercalating moiety coupled to the moiety having an affinity for cancer cells,
wherein the intercalating moiety inserts into the structure of deoxyribonucleic acid-tumor-
seeking biomolecule and comprising acridine, porphyrin, ellipticine, phenantroline,
carbazole, benzimidazole, or a compound that exhibits cytostatic activity; and

a metal complexed with the intercalating moiety.

[[39]]41. (Currently amended) The method of claim [[38]]40, wherein the composition is administered to diagnose at least one of a tumor [[and]]or a malignancy.

[[40]]42. (Currently amended) The method of claim [[38]]40, wherein the composition is administered to treat at least one of a tumor [[and]]or a malignancy.

43. (New) The compound of claim 22, wherein the intercalating moiety comprises a planar, heterocyclic aromatic ring structure.

44. (New) The compound of claim 22, wherein the intercalating moiety comprises acridine, porphyrin, ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic activity, or any combination thereof.

45. (New) The compound of claim 23, wherein the intercalating moiety comprises a planar, heterocyclic aromatic ring structure.

46. (New) The compound of claim 23, wherein the intercalating moiety comprises acridine, porphyrin, ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic activity, or any combination thereof.

47. (New) The compound of claim 32, wherein the intercalating moiety comprises a planar, heterocyclic aromatic ring structure.

48. (New) The composition of claim 32, wherein the intercalating moiety comprises acridine, porphyrin, ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic activity, or any combination thereof.

49. (New) The compound of claim 33, wherein the intercalating moiety comprises a planar, heterocyclic aromatic ring structure.

50. (New) The composition of claim 33, wherein the intercalating moiety comprises acridine, porphyrin, ellipticine, phenantroline, carbazole, benzimidazole, or a compound that exhibits cytostatic activity, or any combination thereof.

51. (New) A compound comprising:
a chemical moiety, wherein the chemical moiety has an affinity for a cancer cell, a tumor, or both;
an intercalating moiety comprising a planar, heterocyclic aromatic ring structure coupled to the moiety having an affinity for a cancer cell, a tumor, or both; and
a metal complexed with the intercalating moiety.

52. (New) The compound of claim 51, wherein the chemical moiety has an affinity for the cancer cell.

53. (New) The compound of claim 51, wherein the chemical moiety has an affinity for the tumor.